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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,634	02/26/2002	Albert Modl	MODL3001/JEK	5404

23364 7590 01/12/2006	EXAMINER
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ART UNIT	PAPER NUMBER
2621	

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/926,634	MODL ET AL.
	Examiner	Art Unit	
	Hadi Akhavannik	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 November 2005</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>16-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>16-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>23 November 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Response to Arguments

1.   112 rejections are withdrawn.

2.   Applicant's arguments with respect to claims 16-33 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   Claims 16-18, 21-31, and 33 rejected under 35 U.S.C. 103(a) as being

unpatentable over Piosenka et al (US 4993068 referred to as "Piosenka" herein) in view

of Brady (5892838).

        Regarding claim 16, Piosenka discloses a portable data carrier capable of

authentication by means of biometric data (figure 3b and column 11 lines 10-42

discloses a portable medium that contains biometric data which is used for

authentication), comprising a memory in which at least two sets of biometric reference

data are stored (column 11 lines 33-35 disclose two sets of biometric data),

        Piosenka does not explicitly disclose generating different sets of reference data

from one and the same biometric feature using different algorithms.

        Brady discloses generating different sets of reference data from one and the

same biometric feature using different algorithms (column 3, lines 31-44 for a general

description and column 5 line 16 to column 11 line 29 for a detailed description,

discloses creating a mater pattern set which includes subsets of features and points of

interest that are stored in memory).

It would have been obvious at the time of the invention to one of ordinary skill in

the art at the time of the invention to include in Piosenka a multiple biometric set

generation means as taught by Brady. The reason for combination is because it allows

the system to determine the most useful biometric identification features (see motivation

of Brady, disclosed in the abstract). Further, Piosenka discloses creating an encrypted

set of biometric information which does constitute a different set in its encrypted form

(figure 3a items 108-109 and column 10 line 62 to column 11 line 9 discloses public key

techniques that can encrypt data on to the memory medium).   Brady is only further

describing a biometric set generation method.

Regarding claim 17, Piosenka and Brady discloses a terminal for authentication

by means of biometric data comprising a sensor arranged to detect one biometric

feature (figure 1 and figure 2 and column 4 lines 55-66 disclose a terminal with sensors

that can detect one biometric), an I/O device for transferring data (column 5 lines 28-30

discloses that the information is transmitted to the computer), and a control and data

processing unit which is arranged to convert biometric data from the sensor which were

derived from the at least one detected biometric feature into comparative data by an

algorithm(column 5 lines 30-51 disclose that the biometric data is converted to a

composite data set which is used as comparative data), wherein at least two different

algorithms are used to convert said biometric data from the sensor into said

comparative data (column 5 lines 20-51 disclose that the data is transferred to the

computer and the data is then modified until it becomes comparative data. This

requires at least one algorithm to transfer the data and one algorithm to alter the

digitized data into comparative data. Brady disclosed creating master set from one and the same biometric feature). Also, see the remarks regarding claim 16 above.

Regarding claims 18, 23-24, Piosenka and Brady discloses that the reference data are transferred by the I/O device from the data carrier to the terminal, and wherein the control and data processing unit are arranged to check the reference data for a match with the comparative data (figure 3b and column 11 lines 10-41 disclose that data is transferred from the data carrier and compared against reference data). All other aspects of claim 18 are addressed in the rejection of claim 16 and 17).

Regarding claim 21 and 25, Piosenka discloses that the sets of reference data and the algorithms used for generating the sets of comparative data have a characteristic identification, and wherein reference data and comparative data with the same identification are checked (column 6 lines 15-25 discloses that each set of information is given its own key, which functions as the characteristic identification).

Regarding claim 22, 26, 31, and 33, Piosenka discloses that at least one detected biometric feature is selected from the group consisting of iris, retina, face, speech, fingerprints and a signature including the writing dynamics determined during signing (figure 1, figure 2 and column 3 lines 44-60 disclose that the biometric feature is selected from a set of possible features. The feature is detected).

Regarding claim 27, Piosenka discloses that several different sets of reference data are derived and stored, and several different sets of comparative data have been converted from detected biometric data, and wherein the several different sets of reference data are compared with the several different sets of comparative data for

authentication (figure 3a, figure 3b and column 4 line 55 to column 8 line 70 disclose that several sets of reference data are stored and are compared against several sets of comparative data for authentication).

Regarding claim 28, Piosenka discloses that the different sets of reference data and the different sets of comparative data are derived and converted from biometric data of the same kind which have been converted by different algorithms (column 5 lines 52-64 disclose that each physical characteristic uses a mathematical algorithm and column 6 lines 15-25 discloses that each set of information uses its own unique algorithm due to the key it uses).

Regarding claim 29, Piosenka discloses that the conversion of the different sets of reference data and comparative data starts out from different biometric data, which have been converted by the same or by different algorithms (column 5 lines 52-64 disclose that each physical characteristic uses a mathematical algorithm and column 6 lines 15-25 discloses that each set of information uses its own unique algorithm due to the key it uses).

Regarding claim 30, Piosenka discloses that the comparison of several different sets of reference data with several different sets of comparative data, the authentication is decided positively if the majority of comparisons are positive (column 8 lines 23-70 disclose that several sets of data are compared and if even one of the data matches, then the authentication is decided positively).

4.   Claims 19, 20, and 32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Piosenka in view Brady as applied above and in further view of Dunn

et al (5987155 referred to as "Dunn" herein).

        Piosenka and Brady discloses all aspects of claim 19 except he does not

disclose the data carrier includes a control and data processing unit arranged to check

the reference data for a match with the comparative data.

        Dunn discloses that the data carrier includes a control and data processing unit

arranged to check the reference data for a match with the comparative data (figure 3

and column 7 lines 12-55 disclose that the smart card, which acts as the data carrier,

can process biometric data to check for authentication).

        It would have been obvious at the time of the invention to one in ordinary skill in

the art to combine in Piosenka in view of Brady a data carrier that has a processor that

can compare sets of biometric data as taught by Dunn in order to add another layer of

security to the identification system and make for a more flexible system. Also,

Piosenka already uses a data carrier to store the biometric information (see abstract for

explanation). Further, both inventions are from the same field of endeavor of biometric

identification.

        Regarding claims 20 and 32, the rejection of claim 19 discloses that the portable

data carrier is a smart card.

                                    Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hadi Akhavannik whose telephone number is 571-272-

8622. The examiner can normally be reached on 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Mancuso can be reached on (571)272-7695. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JOSEPH MANCUSO
SUPERVISORY PATENT EXAMINER